Image 1F 1762

PTO/SB/21 (08-03)
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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Application Number	09/663,872
Filing Date	Septmber 15, 2000
First Named Inventor	Sanchez
Art Unit	1762
Examiner Name	Bareford
Total Number of Pages in This Submission: 24	Attorney Docket Number: D/A0664 (XERZ 2 00608)

ENCLOSURES *(Check all that apply)*

- [x] Fee Transmittal Form
  - [ ] Fee Attached
- [ ] Amendment/Reply
  - [ ] After Final
  - [ ] Affidavits/declaration(s)
- [ ] Extension of Time Request
- [ ] Express Abandonment Request
- [ ] Information Disclosure Statement
- [ ] Certified Copy of Priority Document(s)
- [ ] Response to Missing Parts/ Incomplete Application
  - [ ] Response to Missing Parts under 37 CFR 1.52 or 1.53
- [ ] Drawing(s)
- [ ] Licensing-related Papers
- [ ] Petition
- [ ] Petition to Convert to a Provisional Application
- [ ] Power of Attorney, Revocation Change of Correspondence Address
- [ ] Terminal Disclaimer
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- [ ] CD, Number of CD(s) _____
- [ ] After Allowance communication to Technology Center (TC)
- [ ] Appeal Communication to Board of Appeals and Interferences
- [x] Appeal Communication to TC **(Appeal Notice, Brief, Reply Brief)**
- [ ] Proprietary Information
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Remarks

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	Richard M. Klein Fay, Sharpe, Fagan, Minnich & McKee, LLP
Signature	
Date	November 19, 2003

CERTIFICATE OF TRANSMISSION/MAILING

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PTO/SB/17 (10-03)
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FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT ($) 330.00

Complete if Known	
Application Number	09/663,872
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METHOD OF PAYMENT *(check all that apply)*

☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None

☑ Deposit Account:

Deposit Account Number: 24-0037

Deposit Account Name: Xerox Corporation

The Director is authorized to: *(check all that apply)*

☑ Charge fee(s) indicated below ☑ Credit any overpayments

☑ Charge any additional fee(s) or any underpayment of fee(s)

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FEE CALCULATION

1. BASIC FILING FEE

Large Entity Fee Code	Large Entity Fee ($)	Small Entity Fee Code	Small Entity Fee ($)	Fee Description	Fee Paid
1001	770	2001	385	Utility filing fee	
1002	340	2002	170	Design filing fee	
1003	530	2003	265	Plant filing fee	
1004	770	2004	385	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	

SUBTOTAL (1) ($)

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

		Extra Claims		Fee from below	Fee Paid
Total Claims		-20** =		X	=
Independent Claims		- 3** =		X	=
Multiple Dependent					=

Large Entity Fee Code	Large Entity Fee ($)	Small Entity Fee Code	Small Entity Fee ($)	Fee Description
1202	18	2202	9	Claims in excess of 20
1201	86	2201	43	Independent claims in excess of 3
1203	290	2203	145	Multiple dependent claim, if not paid
1204	86	2204	43	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) ($)

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity Fee Code	Large Entity Fee ($)	Small Entity Fee Code	Small Entity Fee ($)	Fee Description	Fee Paid
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for *ex parte* reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	420	2252	210	Extension for reply within second month	
1253	950	2253	475	Extension for reply within third month	
1254	1,480	2254	740	Extension for reply within fourth month	
1255	2,010	2255	1,005	Extension for reply within fifth month	
1401	330	2401	165	Notice of Appeal	
1402	330	2402	165	Filing a brief in support of an appeal	330.00
1403	290	2403	145	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,330	2453	665	Petition to revive - unintentional	
1501	1,330	2501	665	Utility issue fee (or reissue)	
1502	480	2502	240	Design issue fee	
1503	640	2503	320	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	770	2809	385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810	770	2810	385	For each additional invention to be examined (37 CFR 1.129(b))	
1801	770	2801	385	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

Other fee (specify) _____

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) ($) 330.00

SUBMITTED BY

(Complete *(if applicable)*)

Name *(Print/Type)*	Richard M. Klein	Registration No. *(Attorney/Agent)*	33,000	Telephone	216/861-5582
Signature				Date	November 19, 2003

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By: Lynda S Kalemba

Lynda S Kalemba

PATENT APPLICATION

ATTORNEY DOCKET NO. D/A0664
XERZ 2 00608

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re: J. Michael Sanchez et al.

Application No.: 09/663,872 **Examiner: K. A. Bareford**

Filed: September 15, 2000 **Group Art Unit: 1762**

Title: DEFLOCCULATION APPARATUS AND METHODS THEREOF

APPELLANTS' BRIEF ON APPEAL

11/28/2003 AWONDAF1 00000079 240037 09663872

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TABLE OF CONTENTS

TABLE OF CASES

Cases

This brief is in furtherance of the Notice of Appeal that was filed in the above-referenced patent application on September 19, 2003.

The fees required under 37 C.F.R. § 1.17 are dealt with in the accompanying Transmittal of Appeal Brief.

Appellants submit herewith an Appeal Brief in connection with the above-identified application, wherein claims 1, 4-12, 15-21, 23, and 25-27 were finally rejected in the Office Action of June 4, 2003. What follows is Appellants' Appeal Brief (submitted in triplicate) in accordance with 37 C.F.R. §1.192(a).

1. REAL PARTY OF INTEREST

The real parties in interest in this appeal are the inventors named in the caption of this brief, J. Michael Sanchez et al., and the assignee, Xerox Corporation.

2. RELATED APPEALS AND INTERFERENCES

Appellants are not presently aware of related appeals or interferences currently pending from any applications from which the present application bases its priority.

3. STATUS OF CLAIMS

The status of the claims set forth after the Final Office Action mailed November 15, 2002, was, and is, as follows:

Allowed claims: **none**

Rejected claims: **1, 4-12, 15-21, 23,** and **25-27**

Cancelled claims **2-3, 13-14, 22,** and **24**

The present appeal is directed specifically to claims **1, 4-12, 15-21, 23,** and **25-27**.

4. STATUS OF AMENDMENTS

In the final Office Action of November 15, 2002, the Examiner withdrew a previous objection to claim 24 under 37 C.F.R. § 1.75(c). The Examiner also withdrew the rejection of claims 1, 4-12, and 15-19 under 35 U.S.C. § 112, second paragraph. The rejection of claims 21 and 26 under 35 U.S.C. § 102(b) was withdrawn. Claims 1, 4-7, 10, 12, 16-20, and 27 were rejected under 35 U.S.C. § 103(a) based on U.S. Patent 5,576,075 to Kawasaki in view of U.S. Patent 3,890,240 to Hochberg. Claims 8-9 and 15 were rejected under 35 U.S.C. § 103(a) based upon the Kawasaki patent in view of the Hochberg patent and further in view of European Patent 472 459 A1 (hereinafter '459). Claims 21, 23, and 25-26 are rejected under 35 U.S.C. § 103(a) over Kawasaki in view of the '459 patent. Claim 11 is rejected under 35 U.S.C. § 103(a) over Kawasaki in view of Hochberg and further in view of U.S. Patent 4,112,549 to Min.

5. SUMMARY OF INVENTION

The present development provides, in an aspect, a method including sonicating a stream containing a dispersion comprised of agglomerated primary particles and filtering the resulting sonicated stream containing a dispersion comprised of deagglomerated primary particles (page 5, lines 8-12). The method can further include coating the resulting sonicated stream onto a receiver surface, such as a photoreceptor substrate, preferably a photoreceptor substrate previously coated with a charge blocking layer, charge generating layer, or charge transport layer compositions (page 6, lines 7-13).

6. ISSUES

Whether the rejection of claims 1, 4-7, 10, 12, 16-20, and 27 under 35 U.S.C. § 103(a) as being unpatentable over Kawasaki in view of Hochberg is sustainable.

Whether the rejection of claims 8-9 and 15 under 35 U.S.C. § 103(a) as being unpatentable over Kawasaki in view of Hochberg and further in view of '459 is sustainable.

Whether the rejection of claims 21, 23, and 25-26 under 35 U.S.C. § 103(a) as being unpatentable over Kawasaki in view of '459 is sustainable.

Whether the rejection of claim 11 under 35 U.S.C. § 103(a) as being unpatentable over Kawasaki in view of Hochberg and further in view of Min is sustainable.

7. GROUPING OF CLAIMS

The claims do not stand or fall together; for purposes of convenience, the claims are grouped as follows:

Group I: claims 1, 4-7, 10, 12, 16-20, and 27

Group II: claims 8-9 and 15

Group III: claims 21, 23, and 25-26

Group IV: claim 11

Each of the grouping of claims and the claims in each group are to be considered by the Board considering the arguments and comments rendered herein.

8. ARGUMENT

A. Background

It is submitted that the Examiner, in rejecting the claims, has made improper "obvious to try" rejections and has cited references from nonanalgous art.

B. The Rejection of Claims 1, 4-7, 10, 12, 16-20, and 27 Under 35 U.S.C. § 103(a) as Being Unpatentable Over Kawasaki in view of Hochberg Must Be Reversed

In support of the rejection of claims 1, 4-7, 10, 12, 16-20, and 27 under 35 U.S.C. § 103(a), the Examiner asserted that Kawasaki teaches a method and apparatus for sonicating, filtering, and coating (col. 1, lines 1-15 and col. 6, lines 35-55), a stream containing a dispersion is subjected to a sonicating treatment (col. 2, lines 35-55), the dispersion contains primary particles (col. 1, lines 20-25 and col. 6, lines 35-55), and the resulting sonicated stream containing a dispersion comprised of deagglomerated primary particles is then filtered (col. 6, lines 35-55). The Examiner further asserts that

the particles are then separated in the resulting stream because they are deagglomerated. The filtered and sonicated stream is then coated onto a receiver surface (col. 2, lines 45-55).

Hochberg teaches a process for providing liquid dispersions of toner materials to be applied to a surface (col. 1, lines 5-15). The toner is in the form of particles including carbon black and a dye or pigment (col. 1, lines 55-68). The particles have a tendency to agglomerate, and it is necessary to control this agglomeration to provide desirable coating (col. 3, lines 15-35). As a way for dispersing the particles, Hochberg teaches high frequency, ultrasonic agitation (col. 20, lines 1-55). As taught the particles would be photosensitive (col. 1, lines 5-30). The toner is applied to a charged photoconductive layer (col. 1, lines 15-30).

The Examiner then states that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kawasaki to provide the missing features of these claims in order to provide a desirable coated surface. The Examiner then recites a list of six allegedly obvious modifications necessary to achieve the method and apparatus of the present claims.

Applicants submit the Examiner's rejection is an impermissible "obvious to try" analysis. *In re Gordon*, 733 F.2d 900, 902 (Fed. Cir. 1984). The Examiner has shown no motivation, either explicit or implicit, within either of Kawasaki or Hochberg that would lead one of ordinary skill in the art, upon reading and understanding the references, to modify and vary these parameters. Even if the Examiner were correct in his contention that these six modifications of Kawasaki and Hochberg would result in

the present invention, it is unreasonable to believe that a combination of two disparate references plus six modifications could be "obvious."

Appellants assert that it could only be through the use of impermissible hindsight that the Examiner could reach a conclusion of obviousness based on no less than six modifications. The Examiner has used the Appellant's disclosure as a guide through the references, combining the references in just the right order to arrive at the Appellant's claimed invention. This is an impermissible approach. See *Grain Processing Corp. v. American Maize-Prods. Co.*, 840 F.2d 902, 907 (Fed. Cir. 1988).

Moreover, Appellants assert that the optimization of six parameters, each relative to the other, could only be achieved through the use of undue experimentation. Such optimization of parameters, only achievable through the use of undue experimentation cannot be obvious. The Examiner has not pointed to any suggestion, motivation, or incentive for modifying either reference to arrive at Appellants disclosure. See *In re Laskowski*, 871 F.2d 115, 117 (Fed. Cir. 1989) ("[T]he mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification") (quoting *In re Gordon*, 733 F.2d 900, 902 (Fed. Cir. 1984)). The Examiner must show reasons that the skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the elements from the cited prior art references for combination in the manner claimed. *In re Rouffet*, 149 F.3d 1350 (Fed. Cir. 1998). See also *In re Napier,* 55 F.3d 610, 631 (Fed. Cir. 1995) ("Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination.").

The Examiner has stated that no "obvious to try to modify" statement was made in the rejections. While the Examiner did not explicitly use the "obvious to try" language, the suggested modifications are certainly "obvious to try" modifications, due to the fact that the individual optimization of each suggestion is not obvious. The Examiner has listed items (1) through (6) and states that it would have been obvious to modify and vary these parameters or try these 6 possible choices to arrive at the Appellant's invention where the references gave no indication of which parameters were critical and no suggestion is found within the references themselves for these 6 modifications.

Appellants submit the rejection of Claims 1, 4-7, 10, 12, 16-20, and 27 Under 35 U.S.C. § 103(a) as Being Unpatentable Over Kawasaki in view of Hochberg was improper and must be reversed.

C. The Rejection of Claims 8-9 and 15 Under 35 U.S.C. § 103(a) as Being Unpatentable Over Kawasaki in view of Hochberg and Further in view of '459 Must Be Reversed

In support of the rejection of claims 8-9 and 15 under 35 U.S.C. § 103(a), the Examiner asserted that '459 teaches an ultrasonicator is provided to ultrasonicate a stream of liquid dispersion of agglomerated primary particles.

The Examiner then suggests it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kawasaki in view of Hochberg to further provide an ultrasonicator for the filter as suggested by '459 with an expectation of desirable coating results, because Kawasaki in view of Hochberg teaches a desirable sonication process to provide dispersed particles that include filtration of the treated stream, and '459 teaches that it is desirable to further provide an

ultrasonicator for a filter member after sonicating a stream of dispersed particles to break up the agglomeration so as to provide further deagglomeration. It is then alleged that it would have been obvious to modify Kawasaki in view of Hochberg to provide that the filtering removes objectionable contaminants (i.e., particles of a size larger than the deagglomerated particles) as suggested by '459 with an expectation of desirable coating results, because Kawasaki teaches filtering the sonicated dispersion, and '459 teaches that when filtering a sonicated dispersion, it is desirable to remove overly large particles.

Appellants submit the Examiner is again using an impermissible hindsight analysis. The Examiner has not pointed out in either reference the filtering of at least one objectionable contaminant or wherein the contaminant has an average diameter particle size greater than the average diameter of the deagglomerated particles, nor any suggestion or motivation for combining three references to arrive at the Appellant's disclosure. It seems that the Examiner has used the Appellant's disclosure as a guide in order to piece together references and reconstruct that Appellant's invention.

Moreover, '459 is nonanalogous art. For purposes of evaluating the obviousness of claimed subject matter, one must make certain that a particular reference relied upon constitutes "analogous art." *In re Clay,* 966 F.2d 656, 658-659 (Fed. Cir. 1992). The Examiner has stated that it has been held that a prior art reference must either be in the field of the Applicant's endeavor, or, if not, then reasonably pertinent to the particular problem with which the Applicant was concerned , in order to be relied upon as a basis for rejection of the claimed invention. *In re Oetiker,* 977 F.2d 1443, 1446 (Fed. Cir. 1992). Appellants assert it has also been held that to be

analogous art, even though it may be in a different field from that of the inventor's endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem. *In re Clay*, 966 F.2d 656, 659 (Fed. Cir. 1992).

A person of ordinary skill in the imaging toner art will not likely know about references in the radioactive fuel reclamation art. Further, the problems associated with treating spent nuclear reactor fuel elements are not reasonably related to problems in the imaging arts. The '459 reference relates to treating a residue resulting from dissolving spent nuclear reactor fuel elements in hot nitric acid, and would not have logically commended itself to the present inventor's attention in considering his problem. Appellants assert that the problems associated with treating spent nuclear reactor fuel elements are not reasonably related to the problems in the imaging arts. For this reason, an inventor would not logically look to the '459 reference for guidance in solving problems faced in the imaging arts. A person of ordinary skill in the imaging arts would have no motivation to consider radioactive fuel reclamation art in solving problems in the imaging arts. This is especially true in view of the toxicity issues driving radioactive fuel reclamation that do not drive the present invention. Appellants submit that the '459 reference is not analogous art.

Due to the above-discussed non-obviousness of the proposed combination and the nonanalogous nature of the '459 reference, the rejection of claims 8-9 and 15 under 35 U.S.C. § 103 (a) as being unpatentable over Kawasaki in view of Hochberg and further in view of '459 is improper and must be reversed.

D. The Rejection of Claims 21, 23, and 25-26 Under 35 U.S.C. § 103(a) as Being Unpatentable Over Kawasaki in view of '459 Must Be Reversed

In support of the rejection of claims 21, 23, and 25-26 under 35 U.S.C. § 103(a), the Examiner has stated that Kawasaki teaches a method and apparatus for using an ultrasonicator.

The Examiner then alleges that Kawasaki teaches all the features of these claims except for the treatment using a second sonicator to sonicate the filter, but '459 teaches an ultrasonicator is provided to ultrasonicate a stream of liquid dispersion of agglomerated primary particles.

The Examiner believes it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kawasaki to further provide a ultrasonicator for the filter as suggested by '459 with an expectation of desirable coating results, because Kawasaki teaches a desirable sonication process to provide dispersed particles that includes filtration of the treated stream, and '459 teaches that it is desirable to further provide an ultrasonicator for a filter member after sonicating a stream of dispersed particles to break up the agglomeration so as to provide further deagglomeration.

Appellants submit the Examiner has not pointed to any suggestion within the '459 reference for combining the reference that relates to the homogenizing and conveyance of a mixture of radioactive fuel residue with a reference for a composition and method for the production of magnetic recording medium to arrive at Appellant's disclosure. Further, and as discussed above, '459 is nonanalogous art. For purposes of evaluating the obviousness of claimed subject matter, one must make certain that a particular reference relied upon constitutes "analogous art." *In re Clay*, 966 F.2d 656,

658-659 (Fed. Cir. 1992). The Examiner has stated that it has been held that a prior art reference must either be in the field of the Applicant's endeavor, or, if not, then reasonably pertinent to the particular problem with which the Applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. *In re Oetiker*, 977 F.2d 1443, 1446 (Fed. Cir. 1992). Appellants assert it has also been held that to be analogous art, even though it may be in a different field from that of the inventor's endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem. *In re Clay*, 966 F.2d 656, 659 (Fed. Cir. 1992).

A person of ordinary skill in the imaging toner art will not likely know about references in the radioactive fuel reclamation art. Further, the problems associated with treating spent nuclear reactor fuel elements are not reasonably related to problems in the imaging arts. The '459 reference relates to treating a residue resulting from dissolving spent nuclear reactor fuel elements in hot nitric acid, and would not have logically commended itself to the present inventor's attention in considering his problem. Appellants assert that the problems associated with treating spent nuclear reactor fuel elements are not reasonably related to the problems in the imaging arts. For this reason, an inventor would not logically look to the '459 reference for guidance in solving problems faced in the imaging arts. A person of ordinary skill in the imaging arts would have no motivation to consider radioactive fuel reclamation art in solving problems in the imaging arts. This is especially true in view of the toxicity issues driving radioactive fuel reclamation that do not drive the present invention.

Appellants submit that the '459 reference is not analogous art and the rejection of claims 21, 23, and 25-56 under 35 U.S.C. § 103(a) over Kawasaki in view of '459 is thus improper and must be reversed.

E. The Rejection of Claim 11 Under 35 U.S.C. § 103(a) as Being Unpatentable Over Kawasaki in view of Hochberg and Further in view of Min Must Be Reversed

In support of the rejection of claim 11 under 35 U.S.C. § 103(a), the Examiner has stated that Kawasaki in view of Hochberg teaches all the features of these claims except the gas carrier vehicle, and Min teaches a process for sonicating a stream containing a dispersion of agglomerated primary particles. The Examiner believes it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kawasaki in view of Hochberg to use the sonicating process to also sonicate particles in dispersion in a gas stream as suggested by Min with an expectation of desirable coating results, because Kawasaki in view of Hochberg teaches a desirable sonication process to provide dispersed particles, and Min teaches that it is desirable to sonicate suspended in air as well as liquid.

Appellants submit the Examiner has failed to point out in reference to Min any suggestion, motivation, or incentive for combining an apparatus for the deflocculation of a dry suspension of fibers with a method for the production of magnetic recording media, together with a composition and method of preparing toner. Additionally, the Examiner has failed to explicitly say what the references implied that would suggest of motivate one of ordinary skill to combine the references.

Moreover, Min is nonanalogous art. For purposes of evaluating the obviousness of claimed subject matter, one must make certain that a particular

reference relied upon constitutes "analogous art." *In re Clay*, 966 F.2d 656, 658-659 (Fed. Cir. 1992). The Examiner has stated that it has been held that a prior art reference must either be in the field of the Applicant's endeavor, or, if not, then reasonably pertinent to the particular problem with which the Applicant was concerned , in order to be relied upon as a basis for rejection of the claimed invention. *In re Oetiker*, 977 F.2d 1443, 1446 (Fed. Cir. 1992). Appellants assert it has also been held that to be analogous art, even though it may be in a different field from that of the inventor's endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem. *In re Clay*, 966 F.2d 656, 659 (Fed. Cir. 1992).

A person of ordinary skill in the imaging toner art will not likely know about references in the paper making art. Moreover, the disclosure of Min would not be "logically commended" to an inventor in the imaging arts field. The Examiner has not shown why one of ordinary skill in the imaging arts would have motivation to turn to the paper arts to solve problems in the field of imaging arts. Furthermore, the Examiner has shown no motivation, either explicit or implicit, in any of the three cited references that would lead one of ordinary skill in the imaging arts to combine a reference relating to magnetic recording media with a reference from the paper arts.

Because Min is nonanalogous art, Appellants assert claim 11 is not obvious over Kawasaki in view of Hochberg and further in view of Min. Accordingly, the 35 U.S.C. § 103(a) rejection of claim 11 is improper and must be reversed.

F. Conclusion

Appellants submit that claims 1, 4-12, 15-21, 23, and 25-27 are in condition for allowance.

Accordingly, it is requested that the Examiner's rejections of claims 1, 4-12, 15-21, 23, and 25-27 be reversed.

Respectfully submitted,

FAY, SHARPE, FAGAN,
MINNICH & McKEE, LLP

11/19/2003
Date

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9. APPENDIX:

1. (Previously Presented) A method comprising:

sonicating a stream containing a dispersion comprised of agglomerated primary particles; filtering the resulting sonicated stream containing a dispersion comprised of de-agglomerated primary particles and further comprising coating the resulting sonicated stream onto a receiver surface wherein the receiver surface is a coated photoreceptor substrate and wherein the de-agglomerated primary particles are separated in the resulting sonicated stream.

2. (Cancelled).

3. (Cancelled).

4. (Previously Presented) The method in accordance with claim 1, wherein the primary particles are toner particles comprised of a mixture of at least one colorant and a resin.

5. (Original) The method in accordance with claim 1, wherein the agglomerated primary particles are present in the stream in an amount of from about 0 to about 60 weight percent based on the total weight of the stream

6. (Original) The method in accordance with **claim 1**, wherein the de-agglomerated primary particles have a volume average diameter of from about 0.005 to about 20 micrometers.

7. (Original) The method in accordance with **claim 1**, wherein the primary particle is at least one colorant.

8. (Original) The method in accordance with **claim 1**, wherein the filtering removes at least one objectionable contaminant contained in the stream of de-agglomerated primary particles.

9. (Original) The method in accordance with **claim 8**, wherein the contaminant has an average diameter particle size greater than the average diameter of ultrasonically de-agglomerated particles.

10. (Original) The method in accordance with **claim 1**, wherein the stream further comprises a continuous liquid phase carrier vehicle.

11. (Original) The method in accordance with **claim 1**, wherein the stream further comprises a continuous gas phase carrier vehicle.

12. (Original) The method in accordance with **claim 1**, wherein the sonication is accomplished with at least one ultrasonic member.

13. (Cancelled).

14. (Cancelled).

15. (Original) The method in accordance with claim 1, further comprising sonicating the filter media with a second sonicator during the filtering of the sonicated stream.

16. (Original) The method in accordance with claim 1, further comprising measuring the stream pressure just prior to filtering.

17. (Original) The method in accordance with claim 1, further comprising re-agglomerating the resulting de-agglomerated primary particles.

18. (Original) The method in accordance with claim 1, further comprising analyzing the sonicated stream for third particles arising from degradation of the primary particles during sonication.

19. (Original) The method in accordance with claim 1, the stream of agglomerated or de-agglomerated particles further comprises at least one surfactant.

20. (Original) A method comprising:

ultrasonicating a stream of a dispersion of agglomerated photosensitive particles;

filtering the resulting ultrasonicated stream containing a dispersion of de-agglomerated photosensitive particles; and

coating the resulting ultrasonicated stream onto a receiver surface.

21. (Previously Presented) An apparatus comprising:

an ultrasonicator adapted to ultrasonicate a stream of a liquid dispersion of agglomerated primary particles; a filter member adapted to filter the resulting ultrasonicated stream containing a dispersion of de-agglomerated primary particles; and

further comprising a second ultrasonicator adapted to ultrasonicate the filter member and a coater adapted to coat the resulting filtered stream containing a dispersion of de-agglomerated primary particles onto a receiver.

22. (Cancelled).

23. (Original) The apparatus in accordance with claim 22, wherein the coated receiver is substantially free of agglomerated primary particles.

24. (Cancelled).

25. (Previously Presented) The apparatus in accordance with claim 21, wherein the second ultrasonicator ultrasonicates the filter member when the coater is inactive.

26. (Previously Presented) A method comprising:

sonicating a stream containing a dispersion comprised of agglomerated primary particles; filtering the resulting sonicated stream containing a dispersion comprised of de-agglomerated primary particles, further comprising sonicating the filter media with a second sonicator during the filtering of the sonicated stream; and coating the resulting filtered stream containing a dispersion of de-agglomerated primary particles onto a receiver.

27. (Previously Presented) An apparatus comprising:

an ultrasonicator adapted to ultrasonicate a stream of a liquid dispersion of agglomerated primary particles;

a filter member adapted to filter the resulting ultrasonicated stream containing a dispersion of de-agglomerated primary particles; and

a coater adapted to coat the resulting filtered stream containing a dispersion of de-agglomerated primary particles onto a receiver, wherein the receiver is a coated photoreceptor substrate.

This brief is in furtherance of the Notice of Appeal that was filed in the above-referenced patent application on September 19, 2003.

The fees required under 37 C.F.R. § 1.17 are dealt with in the accompanying Transmittal of Appeal Brief.

Appellants submit herewith an Appeal Brief in connection with the above-identified application, wherein claims 1, 4-12, 15-21, 23, and 25-27 were finally rejected in the Office Action of June 4, 2003. What follows is Appellants' Appeal Brief (submitted in triplicate) in accordance with 37 C.F.R. §1.192(a).

1. REAL PARTY OF INTEREST

The real parties in interest in this appeal are the inventors named in the caption of this brief, J. Michael Sanchez et al., and the assignee, Xerox Corporation.

2. RELATED APPEALS AND INTERFERENCES

Appellants are not presently aware of related appeals or interferences currently pending from any applications from which the present application bases its priority.

3. STATUS OF CLAIMS

The status of the claims set forth after the Final Office Action mailed November 15, 2002, was, and is, as follows:

Allowed claims: **none**

Rejected claims: **1, 4-12, 15-21, 23,** and **25-27**

Cancelled claims **2-3, 13-14, 22,** and **24**

The present appeal is directed specifically to claims **1, 4-12, 15-21, 23,** and **25-27**.

4. STATUS OF AMENDMENTS

In the final Office Action of November 15, 2002, the Examiner withdrew a previous objection to claim 24 under 37 C.F.R. § 1.75(c). The Examiner also withdrew the rejection of claims 1, 4-12, and 15-19 under 35 U.S.C. § 112, second paragraph. The rejection of claims 21 and 26 under 35 U.S.C. § 102(b) was withdrawn. Claims 1, 4-7, 10, 12, 16-20, and 27 were rejected under 35 U.S.C. § 103(a) based on U.S. Patent 5,576,075 to Kawasaki in view of U.S. Patent 3,890,240 to Hochberg. Claims 8-9 and 15 were rejected under 35 U.S.C. § 103(a) based upon the Kawasaki patent in view of the Hochberg patent and further in view of European Patent 472 459 A1 (hereinafter '459). Claims 21, 23, and 25-26 are rejected under 35 U.S.C. § 103(a) over Kawasaki in view of the '459 patent. Claim 11 is rejected under 35 U.S.C. § 103(a) over Kawasaki in view of Hochberg and further in view of U.S. Patent 4,112,549 to Min.

5. SUMMARY OF INVENTION

The present development provides, in an aspect, a method including sonicating a stream containing a dispersion comprised of agglomerated primary particles and filtering the resulting sonicated stream containing a dispersion comprised of deagglomerated primary particles (page 5, lines 8-12). The method can further include coating the resulting sonicated stream onto a receiver surface, such as a photoreceptor substrate, preferably a photoreceptor substrate previously coated with a charge blocking layer, charge generating layer, or charge transport layer compositions (page 6, lines 7-13).

6. ISSUES

Whether the rejection of claims 1, 4-7, 10, 12, 16-20, and 27 under 35 U.S.C. § 103(a) as being unpatentable over Kawasaki in view of Hochberg is sustainable.

Whether the rejection of claims 8-9 and 15 under 35 U.S.C. § 103(a) as being unpatentable over Kawasaki in view of Hochberg and further in view of '459 is sustainable.

Whether the rejection of claims 21, 23, and 25-26 under 35 U.S.C. § 103(a) as being unpatentable over Kawasaki in view of '459 is sustainable.

Whether the rejection of claim 11 under 35 U.S.C. § 103(a) as being unpatentable over Kawasaki in view of Hochberg and further in view of Min is sustainable.

7. GROUPING OF CLAIMS

The claims do not stand or fall together; for purposes of convenience, the claims are grouped as follows:

Group I: claims 1, 4-7, 10, 12, 16-20, and 27

Group II: claims 8-9 and 15

Group III: claims 21, 23, and 25-26

Group IV: claim 11

Each of the grouping of claims and the claims in each group are to be considered by the Board considering the arguments and comments rendered herein.

8. ARGUMENT

A. Background

It is submitted that the Examiner, in rejecting the claims, has made improper "obvious to try" rejections and has cited references from nonanalgous art.

B. The Rejection of Claims 1, 4-7, 10, 12, 16-20, and 27 Under 35 U.S.C. § 103(a) as Being Unpatentable Over Kawasaki in view of Hochberg Must Be Reversed

In support of the rejection of claims 1, 4-7, 10, 12, 16-20, and 27 under 35 U.S.C. § 103(a), the Examiner asserted that Kawasaki teaches a method and apparatus for sonicating, filtering, and coating (col. 1, lines 1-15 and col. 6, lines 35-55), a stream containing a dispersion is subjected to a sonicating treatment (col. 2, lines 35-55), the dispersion contains primary particles (col. 1, lines 20-25 and col. 6, lines 35-55), and the resulting sonicated stream containing a dispersion comprised of deagglomerated primary particles is then filtered (col. 6, lines 35-55). The Examiner further asserts that

the particles are then separated in the resulting stream because they are deagglomerated. The filtered and sonicated stream is then coated onto a receiver surface (col. 2, lines 45-55).

Hochberg teaches a process for providing liquid dispersions of toner materials to be applied to a surface (col. 1, lines 5-15). The toner is in the form of particles including carbon black and a dye or pigment (col. 1, lines 55-68). The particles have a tendency to agglomerate, and it is necessary to control this agglomeration to provide desirable coating (col. 3, lines 15-35). As a way for dispersing the particles, Hochberg teaches high frequency, ultrasonic agitation (col. 20, lines 1-55). As taught the particles would be photosensitive (col. 1, lines 5-30). The toner is applied to a charged photoconductive layer (col. 1, lines 15-30).

The Examiner then states that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kawasaki to provide the missing features of these claims in order to provide a desirable coated surface. The Examiner then recites a list of six allegedly obvious modifications necessary to achieve the method and apparatus of the present claims.

Applicants submit the Examiner's rejection is an impermissible "obvious to try" analysis. *In re Gordon*, 733 F.2d 900, 902 (Fed. Cir. 1984). The Examiner has shown no motivation, either explicit or implicit, within either of Kawasaki or Hochberg that would lead one of ordinary skill in the art, upon reading and understanding the references, to modify and vary these parameters. Even if the Examiner were correct in his contention that these six modifications of Kawasaki and Hochberg would result in

the present invention, it is unreasonable to believe that a combination of two disparate references plus six modifications could be "obvious."

Appellants assert that it could only be through the use of impermissible hindsight that the Examiner could reach a conclusion of obviousness based on no less than six modifications. The Examiner has used the Appellant's disclosure as a guide through the references, combining the references in just the right order to arrive at the Appellant's claimed invention. This is an impermissible approach. See *Grain Processing Corp. v. American Maize-Prods. Co.*, 840 F.2d 902, 907 (Fed. Cir. 1988).

Moreover, Appellants assert that the optimization of six parameters, each relative to the other, could only be achieved through the use of undue experimentation. Such optimization of parameters, only achievable through the use of undue experimentation cannot be obvious. The Examiner has not pointed to any suggestion, motivation, or incentive for modifying either reference to arrive at Appellants disclosure. See *In re Laskowski*, 871 F.2d 115, 117 (Fed. Cir. 1989) ("[T]he mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification") (quoting *In re Gordon*, 733 F.2d 900, 902 (Fed. Cir. 1984)). The Examiner must show reasons that the skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the elements from the cited prior art references for combination in the manner claimed. *In re Rouffet*, 149 F.3d 1350 (Fed. Cir. 1998). See also *In re Napier,* 55 F.3d 610, 631 (Fed. Cir. 1995) ("Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination.").

The Examiner has stated that no "obvious to try to modify" statement was made in the rejections. While the Examiner did not explicitly use the "obvious to try" language, the suggested modifications are certainly "obvious to try" modifications, due to the fact that the individual optimization of each suggestion is not obvious. The Examiner has listed items (1) through (6) and states that it would have been obvious to modify and vary these parameters or try these 6 possible choices to arrive at the Appellant's invention where the references gave no indication of which parameters were critical and no suggestion is found within the references themselves for these 6 modifications.

Appellants submit the rejection of Claims 1, 4-7, 10, 12, 16-20, and 27 Under 35 U.S.C. § 103(a) as Being Unpatentable Over Kawasaki in view of Hochberg was improper and must be reversed.

C. The Rejection of Claims 8-9 and 15 Under 35 U.S.C. § 103(a) as Being Unpatentable Over Kawasaki in view of Hochberg and Further in view of '459 Must Be Reversed

In support of the rejection of claims 8-9 and 15 under 35 U.S.C. § 103(a), the Examiner asserted that '459 teaches an ultrasonicator is provided to ultrasonicate a stream of liquid dispersion of agglomerated primary particles.

The Examiner then suggests it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kawasaki in view of Hochberg to further provide an ultrasonicator for the filter as suggested by '459 with an expectation of desirable coating results, because Kawasaki in view of Hochberg teaches a desirable sonication process to provide dispersed particles that include filtration of the treated stream, and '459 teaches that it is desirable to further provide an

ultrasonicator for a filter member after sonicating a stream of dispersed particles to break up the agglomeration so as to provide further deagglomeration. It is then alleged that it would have been obvious to modify Kawasaki in view of Hochberg to provide that the filtering removes objectionable contaminants (i.e., particles of a size larger than the deagglomerated particles) as suggested by '459 with an expectation of desirable coating results, because Kawasaki teaches filtering the sonicated dispersion, and '459 teaches that when filtering a sonicated dispersion, it is desirable to remove overly large particles.

Appellants submit the Examiner is again using an impermissible hindsight analysis. The Examiner has not pointed out in either reference the filtering of at least one objectionable contaminant or wherein the contaminant has an average diameter particle size greater than the average diameter of the deagglomerated particles, nor any suggestion or motivation for combining three references to arrive at the Appellant's disclosure. It seems that the Examiner has used the Appellant's disclosure as a guide in order to piece together references and reconstruct that Appellant's invention.

Moreover, '459 is nonanalogous art. For purposes of evaluating the obviousness of claimed subject matter, one must make certain that a particular reference relied upon constitutes "analogous art." *In re Clay,* 966 F.2d 656, 658-659 (Fed. Cir. 1992). The Examiner has stated that it has been held that a prior art reference must either be in the field of the Applicant's endeavor, or, if not, then reasonably pertinent to the particular problem with which the Applicant was concerned , in order to be relied upon as a basis for rejection of the claimed invention. *In re Oetiker,* 977 F.2d 1443, 1446 (Fed. Cir. 1992). Appellants assert it has also been held that to be

analogous art, even though it may be in a different field from that of the inventor's endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem. *In re Clay*, 966 F.2d 656, 659 (Fed. Cir. 1992).

A person of ordinary skill in the imaging toner art will not likely know about references in the radioactive fuel reclamation art. Further, the problems associated with treating spent nuclear reactor fuel elements are not reasonably related to problems in the imaging arts. The '459 reference relates to treating a residue resulting from dissolving spent nuclear reactor fuel elements in hot nitric acid, and would not have logically commended itself to the present inventor's attention in considering his problem. Appellants assert that the problems associated with treating spent nuclear reactor fuel elements are not reasonably related to the problems in the imaging arts. For this reason, an inventor would not logically look to the '459 reference for guidance in solving problems faced in the imaging arts. A person of ordinary skill in the imaging arts would have no motivation to consider radioactive fuel reclamation art in solving problems in the imaging arts. This is especially true in view of the toxicity issues driving radioactive fuel reclamation that do not drive the present invention. Appellants submit that the '459 reference is not analogous art.

Due to the above-discussed non-obviousness of the proposed combination and the nonanalogous nature of the '459 reference, the rejection of claims 8-9 and 15 under 35 U.S.C. § 103 (a) as being unpatentable over Kawasaki in view of Hochberg and further in view of '459 is improper and must be reversed.

D. The Rejection of Claims 21, 23, and 25-26 Under 35 U.S.C. § 103(a) as Being Unpatentable Over Kawasaki in view of '459 Must Be Reversed

In support of the rejection of claims 21, 23, and 25-26 under 35 U.S.C. § 103(a), the Examiner has stated that Kawasaki teaches a method and apparatus for using an ultrasonicator.

The Examiner then alleges that Kawasaki teaches all the features of these claims except for the treatment using a second sonicator to sonicate the filter, but '459 teaches an ultrasonicator is provided to ultrasonicate a stream of liquid dispersion of agglomerated primary particles.

The Examiner believes it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kawasaki to further provide a ultrasonicator for the filter as suggested by '459 with an expectation of desirable coating results, because Kawasaki teaches a desirable sonication process to provide dispersed particles that includes filtration of the treated stream, and '459 teaches that it is desirable to further provide an ultrasonicator for a filter member after sonicating a stream of dispersed particles to break up the agglomeration so as to provide further deagglomeration.

Appellants submit the Examiner has not pointed to any suggestion within the '459 reference for combining the reference that relates to the homogenizing and conveyance of a mixture of radioactive fuel residue with a reference for a composition and method for the production of magnetic recording medium to arrive at Appellant's disclosure. Further, and as discussed above, '459 is nonanalogous art. For purposes of evaluating the obviousness of claimed subject matter, one must make certain that a particular reference relied upon constitutes "analogous art." *In re Clay*, 966 F.2d 656,

658-659 (Fed. Cir. 1992). The Examiner has stated that it has been held that a prior art reference must either be in the field of the Applicant's endeavor, or, if not, then reasonably pertinent to the particular problem with which the Applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. *In re Oetiker*, 977 F.2d 1443, 1446 (Fed. Cir. 1992). Appellants assert it has also been held that to be analogous art, even though it may be in a different field from that of the inventor's endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem. *In re Clay*, 966 F.2d 656, 659 (Fed. Cir. 1992).

A person of ordinary skill in the imaging toner art will not likely know about references in the radioactive fuel reclamation art. Further, the problems associated with treating spent nuclear reactor fuel elements are not reasonably related to problems in the imaging arts. The '459 reference relates to treating a residue resulting from dissolving spent nuclear reactor fuel elements in hot nitric acid, and would not have logically commended itself to the present inventor's attention in considering his problem. Appellants assert that the problems associated with treating spent nuclear reactor fuel elements are not reasonably related to the problems in the imaging arts. For this reason, an inventor would not logically look to the '459 reference for guidance in solving problems faced in the imaging arts. A person of ordinary skill in the imaging arts would have no motivation to consider radioactive fuel reclamation art in solving problems in the imaging arts. This is especially true in view of the toxicity issues driving radioactive fuel reclamation that do not drive the present invention.

Appellants submit that the '459 reference is not analogous art and the rejection of claims 21, 23, and 25-56 under 35 U.S.C. § 103(a) over Kawasaki in view of '459 is thus improper and must be reversed.

E. The Rejection of Claim 11 Under 35 U.S.C. § 103(a) as Being Unpatentable Over Kawasaki in view of Hochberg and Further in view of Min Must Be Reversed

In support of the rejection of claim 11 under 35 U.S.C. § 103(a), the Examiner has stated that Kawasaki in view of Hochberg teaches all the features of these claims except the gas carrier vehicle, and Min teaches a process for sonicating a stream containing a dispersion of agglomerated primary particles. The Examiner believes it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kawasaki in view of Hochberg to use the sonicating process to also sonicate particles in dispersion in a gas stream as suggested by Min with an expectation of desirable coating results, because Kawasaki in view of Hochberg teaches a desirable sonication process to provide dispersed particles, and Min teaches that it is desirable to sonicate suspended in air as well as liquid.

Appellants submit the Examiner has failed to point out in reference to Min any suggestion, motivation, or incentive for combining an apparatus for the deflocculation of a dry suspension of fibers with a method for the production of magnetic recording media, together with a composition and method of preparing toner. Additionally, the Examiner has failed to explicitly say what the references implied that would suggest of motivate one of ordinary skill to combine the references.

Moreover, Min is nonanalogous art. For purposes of evaluating the obviousness of claimed subject matter, one must make certain that a particular

reference relied upon constitutes "analogous art." *In re Clay*, 966 F.2d 656, 658-659 (Fed. Cir. 1992). The Examiner has stated that it has been held that a prior art reference must either be in the field of the Applicant's endeavor, or, if not, then reasonably pertinent to the particular problem with which the Applicant was concerned , in order to be relied upon as a basis for rejection of the claimed invention. *In re Oetiker*, 977 F.2d 1443, 1446 (Fed. Cir. 1992). Appellants assert it has also been held that to be analogous art, even though it may be in a different field from that of the inventor's endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem. *In re Clay*, 966 F.2d 656, 659 (Fed. Cir. 1992).

A person of ordinary skill in the imaging toner art will not likely know about references in the paper making art. Moreover, the disclosure of Min would not be "logically commended" to an inventor in the imaging arts field. The Examiner has not shown why one of ordinary skill in the imaging arts would have motivation to turn to the paper arts to solve problems in the field of imaging arts. Furthermore, the Examiner has shown no motivation, either explicit or implicit, in any of the three cited references that would lead one of ordinary skill in the imaging arts to combine a reference relating to magnetic recording media with a reference from the paper arts.

Because Min is nonanalogous art, Appellants assert claim 11 is not obvious over Kawasaki in view of Hochberg and further in view of Min. Accordingly, the 35 U.S.C. § 103(a) rejection of claim 11 is improper and must be reversed.

F. Conclusion

Appellants submit that claims 1, 4-12, 15-21, 23, and 25-27 are in condition for allowance.

Accordingly, it is requested that the Examiner's rejections of claims 1, 4-12, 15-21, 23, and 25-27 be reversed.

Respectfully submitted,

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9. APPENDIX:

1. (Previously Presented) A method comprising:

sonicating a stream containing a dispersion comprised of agglomerated primary particles; filtering the resulting sonicated stream containing a dispersion comprised of de-agglomerated primary particles and further comprising coating the resulting sonicated stream onto a receiver surface wherein the receiver surface is a coated photoreceptor substrate and wherein the de-agglomerated primary particles are separated in the resulting sonicated stream.

2. (Cancelled).

3. (Cancelled).

4. (Previously Presented) The method in accordance with **claim 1**, wherein the primary particles are toner particles comprised of a mixture of at least one colorant and a resin.

5. (Original) The method in accordance with **claim 1**, wherein the agglomerated primary particles are present in the stream in an amount of from about 0 to about 60 weight percent based on the total weight of the stream

6. (Original) The method in accordance with **claim 1**, wherein the de-agglomerated primary particles have a volume average diameter of from about 0.005 to about 20 micrometers.

7. (Original) The method in accordance with **claim 1**, wherein the primary particle is at least one colorant.

8. (Original) The method in accordance with **claim 1**, wherein the filtering removes at least one objectionable contaminant contained in the stream of de-agglomerated primary particles.

9. (Original) The method in accordance with **claim 8**, wherein the contaminant has an average diameter particle size greater than the average diameter of ultrasonically de-agglomerated particles.

10. (Original) The method in accordance with **claim 1**, wherein the stream further comprises a continuous liquid phase carrier vehicle.

11. (Original) The method in accordance with **claim 1**, wherein the stream further comprises a continuous gas phase carrier vehicle.

12. (Original) The method in accordance with **claim 1**, wherein the sonication is accomplished with at least one ultrasonic member.

13. (Cancelled).

14. (Cancelled).

15. (Original) The method in accordance with claim 1, further comprising sonicating the filter media with a second sonicator during the filtering of the sonicated stream.

16. (Original) The method in accordance with claim 1, further comprising measuring the stream pressure just prior to filtering.

17. (Original) The method in accordance with claim 1, further comprising re-agglomerating the resulting de-agglomerated primary particles.

18. (Original) The method in accordance with claim 1, further comprising analyzing the sonicated stream for third particles arising from degradation of the primary particles during sonication.

19. (Original) The method in accordance with claim 1, the stream of agglomerated or de-agglomerated particles further comprises at least one surfactant.

20. (Original) A method comprising:

ultrasonicating a stream of a dispersion of agglomerated photosensitive particles;

filtering the resulting ultrasonicated stream containing a dispersion of de-agglomerated photosensitive particles; and

coating the resulting ultrasonicated stream onto a receiver surface.

21. (Previously Presented) An apparatus comprising:

an ultrasonicator adapted to ultrasonicate a stream of a liquid dispersion of agglomerated primary particles; a filter member adapted to filter the resulting ultrasonicated stream containing a dispersion of de-agglomerated primary particles; and

further comprising a second ultrasonicator adapted to ultrasonicate the filter member and a coater adapted to coat the resulting filtered stream containing a dispersion of de-agglomerated primary particles onto a receiver.

22. (Cancelled).

23. (Original) The apparatus in accordance with claim 22, wherein the coated receiver is substantially free of agglomerated primary particles.

24. (Cancelled).

25. (Previously Presented) The apparatus in accordance with claim 21, wherein the second ultrasonicator ultrasonicates the filter member when the coater is inactive.

26. (Previously Presented) A method comprising:

sonicating a stream containing a dispersion comprised of agglomerated primary particles; filtering the resulting sonicated stream containing a dispersion comprised of de-agglomerated primary particles, further comprising sonicating the filter media with a second sonicator during the filtering of the sonicated stream; and coating the resulting filtered stream containing a dispersion of de-agglomerated primary particles onto a receiver.

27. (Previously Presented) An apparatus comprising:

an ultrasonicator adapted to ultrasonicate a stream of a liquid dispersion of agglomerated primary particles;

a filter member adapted to filter the resulting ultrasonicated stream containing a dispersion of de-agglomerated primary particles; and

a coater adapted to coat the resulting filtered stream containing a dispersion of de-agglomerated primary particles onto a receiver, wherein the receiver is a coated photoreceptor substrate.